



US006304855B1

(12) **United States Patent**
Burke(10) **Patent No.:** **US 6,304,855 B1**(45) **Date of Patent:** ***Oct. 16, 2001**(54) **COMPUTER SYSTEM FOR ALLOWING A
CONSUMER TO PURCHASE PACKAGED
GOODS AT HOME**5,848,399 * 12/1998 Burke 705/27
5,930,769 * 7/1999 Rose 705/27
6,026,377 * 2/2000 Burke 705/27(76) **Inventor:** **Raymond R. Burke**, 1700 N. Russell
Rd., Bloomington, IN (US) 47408**FOREIGN PATENT DOCUMENTS**

40-3149696-A * 6/1991 (JP) .

(*) **Notice:** Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.**OTHER PUBLICATIONS**O'Connor—"Data Superhighway Revolution Will Be Tele-
vised . . . Later", San Jose Mercury News, Business Section,
Thursday, Jun. 24, 1993, p. 1E.*This patent is subject to a terminal dis-
claimer.

* cited by examiner

(21) **Appl. No.:** **09/457,067****Primary Examiner**—Joseph Thomas
(74) **Attorney, Agent, or Firm**—Wolf, Greenfield & Sacks,
P.C.(22) **Filed:** **Dec. 7, 1999**(57) **ABSTRACT****Related U.S. Application Data**(63) Continuation of application No. 09/205,882, filed on Dec. 4,
1998, now Pat. No. 6,026,377, which is a continuation of
application No. 08/686,755, filed on Jul. 25, 1996, now Pat.
No. 5,848,399, which is a continuation of application No.
08/159,335, filed on Nov. 30, 1993, now abandoned.

A system for generating images representative of a store
shelf includes a retail space management system for gener-
ating information describing product and shelf sizes and
locations in three dimensions, and including a code which is
unique to each product. The products are typically commod-
ity goods. A product database is used to store images of
product packages which are accessible using codes unique to
each product. A three-dimensional modeling and display
system which takes size and location information from the
retail space management system and generates three-
dimensional models of each shelf and product and accesses
the product database using the codes provided by the retail
space management system to obtain images for each prod-
uct. It generates a display of each product on each shelf by
combining the obtained images and the generated three-
dimensional models. The consumer may manipulate the
display to change what is being viewed, to examine product
packages and to purchase products.

(51) **Int. Cl.**⁷ **G06F 17/60; H04N 7/173;**
G06K 15/00
(52) **U.S. Cl.** **705/27; 705/28; 235/383;**
235/385; 345/419; 345/429; 345/433
(58) **Field of Search** **705/27, 26, 28;**
235/383, 385, 375, 378, 376; 345/419,
425, 429, 433, 427, 352, 353, 335, 962,
964; 348/12, 13(56) **References Cited****U.S. PATENT DOCUMENTS**5,515,268 * 5/1996 Yoda 705/26
5,754,938 * 5/1998 Herz et al. 725/116**56 Claims, 18 Drawing Sheets**